

REMARKS

Claims 3-18 are pending.

Support for the amendment to claims 3 and 5 can be found in Example 1, beginning in the Specification on page 27, line 26.

Support for the amendment to claims 4 and 18 can be found in original claim 14.

Support for new claim 19 can be found in the Specification, Example 1, on page 28.

No new matter has been added.

Statement of the Interview

Applicants thank the Examiner and Primary Examiner Kishore for granting an Interview and for their helpful comments. The Examiners stated that the enablement rejection for claims 3-18 was withdrawn and need not be addressed in this Response. All of the claims were discussed with respect to the remaining rejections, but no further agreement was reached.

Rejections Under 35 USC § 112, second paragraph

The Examiner has rejected claim 5 lack of antecedent basis for recitation of the phrase “wherein said scarring is normotrophic scarring.” Applicants have amended claim 5 to properly refer to wound reduction, thereby overcoming the rejection.

Rejections Under 35 USC § 103

WO 99/04828 ('828) in view of WO 94/17837 ('837), “Jeffrey et al.” and “Yashwant et al.”

The Examiner has rejected claims 3-18 as being obvious over WO 99/04828 ('828) in view of WO 94/17837 ('837) and further in view of “Jeffrey et al.” and “Yashwant et al.” The Examiner contends that the '828 patent publication discloses that the following set of hyaluronic acid derivatives can be used to treat adhesion and scar formation: (1) hyaluronic acid esterified with alcohols, (2) auto-crosslinked esters of hyaluronic acid, (3) cross-linked hyaluronic acid compounds, (4) hemiesters of succinic

acid, (5) N-sulphated derivatives of hyaluronic acid and (6) amid derivatives. The Examiner also contends that these listed hyaluronic acid derivatives can be formulated as gels and pharmacologically active substances can be added. The Examiner acknowledges that '828 does not specifically teach skin scar treatment.

The Examiner tries to fill this void with selected teachings from the '837, "Jeffrey et al." and "Yashwant et al." references. Specifically, the Examiner contends that '837 teaches a multilayer non-woven material comprising a surface layer which comes into contact with the skin and one or more other layers which do not come into contact with the skin, wherein said surface layer which comes into contact with the skin is at least one derivative of hyaluronic acid. The Examiner also contends that the reference discloses that the materials are used in dermatology such as treating skin pathologies. With respect to the "Jeffrey et al.," the Examiner states that the reference "teaches hyaluronate derivatives and their application to wound healing and wound repair with reduced scarring. She also states "Yeshwant teaches application of benzyl hyaluronate as wound dressings." From this the Examiner concludes that it would have been obvious for a skilled artisan to have used hyaluronic acid ester for the treatment of scarring on the skin. Applicants respectfully traverse.

Applicants first point out that the Examiner has wrongly cited two of the references. The first author of the "Jeffrey et al." reference is Jeffrey Davidson and the reference should be cited as Davidson et al. The first author of the "Yeshwant et al." reference is Lisa Ruiz-Cardona and this reference should be cited as Ruiz-Cardona et al. Applicants have used the proper citations for the references in the discussion below.

In the response filed on September 30, 2008, Applicants stated that the type of post-surgical adhesion "scar" referred to in the '828 reference is not comparable to skin scarring, especially normotrophic scarring. Furthermore, the **'828 reference teaches away** from the instant invention by stating that hyaluronic acid derivatives prevent adhesion. In other words, **one skilled in the art would not expect success** when using

hyaluronic acid derivatives known to prevent adhesion for treatments that require adhesion to be present.

Applicants submit that the **‘837 reference teaches away** from the instant invention. As noted in the accompanying Declaration by Dr. Zanellato, the ‘837 reference is directed to use of its materials for skin pathologies. Cutaneous scars, especially normotrophic scars, are not skin pathologies. Dr. Zanellato also notes that ‘837 states that hyaluronic acid derivates and/or their mixtures have (1) poor mechanical characteristics when wet due to its tendency to form a gel when in contact with aqueous fluids such a physiological fluids, (2) high cost and (3) excessively high vapor transmission values (see Description of Related Art). ‘837 then states “These drawbacks are particularly significant in cases where poor exudate production is present” (emphasis added). In Dr. Zanellato’s opinion, the **skilled artisan** reading the ‘837 reference **would not conclude that** using hyaluronic acid to treat normotrophic scarring **would be successful**.

With respect to the Davidson et al., this reference presents the results of cutaneous wound repair experiments conducted with two hyaluronic acid formulations. Dr. Zanellato states that the reference shows that the two hyaluronic acid formulations used did not produce results significantly different from the controls. She concludes that based on this disclosure, the **skilled artisan would not have any expectation of success** in using hyaluronic acid derivates for reducing the amount of normotrophic scarring. That is, despite any effects reported for tympanic membrane repair when treated with a salt of hyaluronic acid, the results reported in this publication show no improvement in cutaneous wound repair. In other words, the results of **this publication teach away** from the instant invention.

Dr. Zanellato also states that the Ruiz-Cardona et al. reference is concerned only with determining the CO₂, O₂ and water vapor transmission rates of benzyl hyaluronate ester membranes for assessing their potential as wound dressing. She notes that there is no reference to the process of normotrophic scarring in the reference and also notes that there are many wound dressings available that have no reducing affect on normotrophic

scarring. Again, her conclusion is that a skilled artisan would **have no expectation for success** in reducing normotrophic scarring based on the teachings of this reference.

Dr. Zanellato points out that the ability of the hyaluronic acid derivatives to reduce normotrophic scarring is not shared by hyaluronic acid or its salts. She points to the data presented in Example 1 (*see* Specification page 27, line 4) which shows that treatment of wounds with HYAFF® 11p75 provides statistically significantly better results than treatment with hyaluronic acid alone. Dr. Zanellato also provides results from another study conducted using the auto-crosslinked ester of hyaluronic acid which show a 50% reduction in scarring after a single treatment as compared to the control group treated with hyaluronic acid. According to Dr. Zanellato, these results would not be expected from the prior art and are not even suggested, given that the prior art shows no difference between treatment of wounds with hyaluronic acid derivatives and hyaluronic acid.

Consequently, in view of the above, Applicants respectfully request reconsideration and removal of the rejections.

Conclusion

Applicants hereby submit that all of the pending claims define novel, unobvious and patentable subject matter and respectfully request reconsideration of the rejections and allowance of the claims.

Pursuant to the provisions of 37 C.F.R. §§ 1.17 and 1.136(a), Applicants petition for an extension of one (1) month to Monday, April 14, 2008, the date of April 12, 2008 falling on a Saturday, for the period in which to file a response to the Office Action dated December 12, 2007. The Commissioner is hereby authorized to charge Deposit Account 02-2448 in the amount of \$120 for the fee for extension of response within the first month.

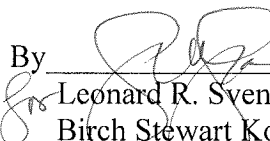
Should there be any outstanding matters that need to be resolved in the present application; the Examiner is respectfully requested to contact Susan W. Gorman (Reg.

No. 47,604) at the telephone number of the undersigned below, to conduct an interview in an effort to expedite prosecution in connection with the present application.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. §§ 1.16 or 1.17; particularly, extension of time fees.

Respectfully submitted,

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Encls.: Declaration of Dr. Anna Zanellato